

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (cancelled).
2. (currently amended) A method according to claim 22, wherein the continuously moving bed in the closed dryer comprises an agitated vessel having at least one agitating shaft, wherein the shaft is heated to increase the heat transfer and drying efficiency of the dryer.
3. (previously presented) A method according to claim 2, wherein drying of the polymer gel is carried out under at least one of the following conditions vacuum, heated air, inert gas, and steam.
4. (previously presented) A method according to claim 22, wherein maturity of the polymer is carried out in a first zone of the closed dryer.
5. (previously presented) A method according to claim 22, including mixing into at least one of the closed polymerization reactor and the closed dryer an additive selected from the group consisting of monomers, comonomers solvents, and mixtures

thereof.

6. (previously presented) A method according to claim 22, including recycling to at least one of the closed polymerization reactor and the closed dryer dried SAP fines.

7. (previously presented) A method according to claim 22, including equipping at least one of the closed polymerization reactor and the closed dryer with condensing and recycling systems of residual reactants, solvents and additives.

8. (previously presented) A method according to claim 7, including operating the condensing and recycling systems in either in an independent or combined way.

9. (previously presented) A method according to claim 7, wherein the residual reactants, solvents and additives are at least partly recycled to at least one of the closed polymerization reactor and the closed dryer.

10. (previously presented) A method according to claim 22, wherein at least one of a pressure lock chamber and a gel cutting system is located between the closed polymerization reactor and the closed dryer.

11. (previously presented) A method according to claim 10, the pressure lock chamber is selected from one of a rotary valve and a piston lock system.

12. (previously presented) A method according to claim 10, including incorporating into a reaction mixture exiting the closed polymerization reactor, at least one of monomers,

comonomers and solvents in the pressure lock chamber.

13. (canceled).

14. (previously presented) A method according to claim 10, including incorporating in the gel cutting system at least one of monomers, comonomers and solvents to a reaction mixture exiting the closed polymerization reactor.

15. (previously presented) A method according to claim 22, wherein the polymer gel leaving the closed polymerization reactor is mixed in a mixer with at least one additive for improving free-flowing properties before entering the closed dryer.

16. (previously presented) A method according to claim 15, wherein the closed polymerization reactor, the closed dryer and the mixer between them all operate at either the same pressure or different pressures.

17. (previously presented) A method according to claim 16, wherein the closed polymerization reactor, the closed dryer and the mixer between them operate under a vacuum.

18. (previously presented) A method according to claim 17, wherein the vacuum in the closed dryer is lower than the vacuum in the closed polymerization reactor and the mixer.

19. (previously presented) A method according to claim 18, wherein in which when the closed dryer is at a temperature higher than the closed polymerization reactor and mixer devices, the polymer gel in the closed dryer is flashed leading to intensive evaporation of solvents and un-reacted components and to higher

drying efficiency of the SAP, wherein the flash allows the SAP particles to be more porous and thus have an increased liquid absorption rate.

20. (previously presented) A method according to 22, wherein the dried SAP fines exiting the closed dryer are partly cooled during their passage through a jacketed continuous discharge system.

21. (cancelled).

22. (currently amended) A continuous process for the production of dried superabsorbent polymers (SAPs) comprising:

carrying out a polymerization reaction by continuously conveying reactants and catalysts in a closed continuous axially conveying polymerization reactor to form a polymer gel, wherein the polymerization reaction is selected from the group consisting of (1) bulk aqueous solution polymerization and (2) suspension polymerization;

drying the resulting polymer gel ~~on~~ by continuously moving the polymer gel by means of a continuously moving bed of the polymer gel in a closed dryer; and

discharging dried SAP fines.